**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, DC 20554**

In the Matter of:

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| Connect America Fund | WC Docket No. 10-90 |
| A National Broadband Plan for Our Future | GN Docket No. 09-51 |
| Establishing Just and Reasonable Rates for Local Exchange Carriers | WC Docket No. 07-135 |
| High-Cost Universal Service Support | WC Docket No. 05-337 |
| Developing an Unified Intercarrier Compensation Regime | CC Docket No. 01-92 |
| Federal-State Joint Board on Universal Service | CC Docket No. 96-45 |
| Lifeline and Link-Up | WC Docket No. 03-109 |

**COMMENTS OF ADVANCED REGIONAL COMMUNICATIONS COOPERATIVE ON BEHALF OF CLARION HOSPITAL, CLARION, PENNSYLVANIA**

**INTRODUCTION AND BACKGROUND**

The Advanced Regional Communications Cooperative (ARCC) is a non-profit cooperative centered in rural Clarion County, Pennsylvania. ARCC is dedicated to developing and sustaining an open-access high-speed broadband network throughout the Clarion region. ARCC's members include several important anchor institutions, including Clarion Hospital and Clarion University, as well as numerous business organizations, such as the Clarion County Economic Development Corporation, and individual business.

The Clarion region is one of the most rural communities in the Commonwealth of Pennsylvania – it is also a region that is extremely underserved by modern high-speed broadband service. While there are many miles of broadband infrastructure crossing through the region, these "core" systems are not accessible for distributed use. Additionally, the geography of the region, which consists of hills and valleys, reinforces the rural and somewhat isolated nature of much of the region's population. While the county's population was estimated at 40,000 in 2008 by the United States Census, only around 6,000 residents live in the Borough of Clarion, which is the largest community in the County – and these figures are skewed due to the presence of Clarion University of Pennsylvania. This means that the bulk of the region's population lives in very small towns (fewer than 2,000 residents) or in even smaller hamlets or unincorporated collections of residences.

These facts have a direct impact on the rate and nature of broadband deployment and access across the region. Less than 50 percent of households in Clarion County have access to the minimum broadband speeds defined by the National Telecommunications and Information Administration for qualification under the broadband programs of the Recovery Act. Subscribership is at 40 percent of households or less – and there is no fixed or mobile service provider advertising broadband transmission speeds of at least three Mbps downstream.

Not only does this lack of access to high-speed broadband have an impact on Clarion region businesses and residents, but it negatively impacts the operations of anchor institutions in the

region, especially Clarion Hospital.  As a community-based hospital serving a population of some 68,500 residents across over 1,200 square miles, Clarion Hospital is the main health care resource for the entire area.

Additionally, Clarion Hospital plays a major role in the region's economy.  At over 650 employees, it is the second-largest employer in Clarion County after Clarion University.  These payrolls provide over $25 million annual to a local economy that has seen significant impact from the recession.  Many of the community's major businesses have had to downsize or even end operations in face of the current economic challenges – causing severe ripple effects throughout the local economy.  As a major anchor institution within the region and one of the founding members of the ARCC, Clarion Hospital is committed to working with community partners and others across the country to help leverage improved high-speed broadband service and access to improve the economy of the Clarion Region.

In addition to this broader goal of supporting economic development, there is a clear need for Clarion Hospital to have access to improved high-speed broadband service.  While the Hospital serves as the primary health care resource for the community, the primary health care access point for many of the region's residents lies with primary care doctors based in smaller population centers located throughout the region.  These doctors are often located significant distance from the hospital, and bad weather can make accessing the resources of the Hospital even more difficult.

Additionally, the Hospital is facing significant physician challenges in the coming years.  Over 65 percent of Clarion Hospital's medical staff is over 55, meaning that the Hospital needs to take significant steps to recruit new physicians.  Part of that is improving the Hospital's facilities and equipment, an effort that the Hospital's leadership has already embarked upon.  Another part is helping to meet the desires of younger doctors to be able to do work and access patient information from home – something that depends upon high-speed broadband.  Unfortunately, the Clarion region currently lacks the infrastructure to support this need.

For those reasons, the ARCC applauds the Commission for its efforts to expand high-speed broadband access to the nation and especially for its focus on broadband access to rural health care providers.  The USF reforms proposed by the Commission sets a solid foundation for improving access to high-speed broadband for rural health care providers.  It also recognizes the role that these health care providers play in their communities, especially the role they play as anchor institutions.

That said, there are a number of elements in the proposed reforms as outlined in this Notice of Proposed Rulemaking (NPRM) that should be adjusted to better recognize this role and to better leverage it to ensure that the full potential of high-speed broadband service is recognized and utilized by the broader community.  The ARCC makes these comments based upon our experience working to develop a high-speed broadband network in the Clarion region.  Our work began prior to the passage of the Recovery Act and has involved varied efforts, including outreach to major broadband providers, surveys of community residents and businesses, and application for funding through Recovery Act broadband programs.  Such efforts are in-line with the mission for the Universal Service Fund as mandated by Congress and reflect the broad goals for reforming the Rural Health Care Support Mechanism as outlined by the Commission in its introduction to the NPRM.

**NPRM COMMENTS**

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**I. INTRODUCTION**
1. Bringing robust, affordable broadband to all Americans is the great infrastructure
challenge of our time. The private sector is taking the lead in meeting this challenge, but in areas of
the country where it is not economically viable to deploy and/or operate broadband networks,
including many rural areas, public support is needed to spur private investment. Today, as the
National Broadband Plan recommends, we propose to fundamentally modernize the Commission's
Universal Service Fund (USF or Fund) and intercarrier compensation (ICC) system. We propose to
do so by eliminating waste and inefficiency and reorienting USF and ICC to meet the nation's
broadband availability challenge, transforming a 20th century program into an integrated program
tailored for 21st century needs and opportunities. (Page 4)

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**COMMENT –**The practice of funding single use networks for healthcare, education, or any other
sector in a community, effectively cherry picks the anchor institutions in a community, creating
inefficiencies. This cherry picking of anchor institutions through multiple dedicated networks
decreases the ability of a broadband service provider to build and operate a network to provide
service to non-public entities in unserved and underserved communities.  Other community use
should be allowed and encouraged, especially in unserved and underserved communities.

Subsidizing the deployment of dedicated networks with public funds in unserved and underserved
communities should be discouraged.  This current practice will continue to hinder last mile
broadband development in rural America. Systems need to be built to allow for integration of
businesses and other anchor institutions with households. This is essential for rural America if we
want to develop telehealth systems in these locations. These are the locations that will be served
well because of distances and road systems preventing patients to be transported to healthcare
facilities.

Additionally, the deployment of dedicated-use networks when the network is capable of broader
uses is an inefficient use of taxpayer dollars and has the potential to impact the ability of the ancor
institution to complete its mission over a broader area.  For instances, recruiting physicians in rural
America means that young doctors, such as radiologists, will want to be able to perform review of
patient status on-line at home. This will save time as well as save money on transportation costs;
however, a dedicated-use system going to a very finite number of connection points prevents these
experts from taking advantage of the taxpayer-subsidized networks deployed in their communities.

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4. In the 21st century, Americans will use fixed and mobile networks to experience the benefits of
broadband. Businesses, anchor institutions, and individuals rely on the high-speed capabilities of
fixed broadband networks for services such as high-definition remote medical consultations,
"telepresence" videoconferencing, and video-based distance learning. Meanwhile, as desktop PCs
give way to laptops, netbooks, smart phones, and tablets, more people are taking their broadband
devices on the road and using mobile broadband connectivity in their jobs, education, and health
care. The benefits of mobility may be particularly important to rural consumers and schoolchildren
who typically travel farther distances to reach work and school, and are vital for public safety:
Approximately half of all 911 calls today are made from mobile phones. At the same time, fixed
networks remain essential for mobile services, which typically depend on fixed backhaul to connect
cell towers and enable mobile communications to other networks. (page 5)

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**COMMENT -**  Over the last several years with all the new mobile devices out, it has become very
clear that all networks will have to have at least both fiber and wireless capabilities. Having a

network that will allow connectivity throughout the community is now needed for not only emergency services, but also as a logical step in connecting the entire last-mile. If a system covers over 95% of a geography with wireless, having one system would allow students to utilize the network at not only a library, but in their homes.

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8. We face these problems because our universal service rules and our ICC system, designed for 20th century networks and market dynamics, have not been comprehensively reassessed in more than a decade, even though the communications landscape has changed dramatically. Mobile services are vastly more prominent than even a few years ago—more than 27 percent of adults live in households with only wireless phones.10 Broadband Internet access revenues have grown from $13.1 billion in 2003 to $36.7 billion in 2009, while traditional wireline telephone (switched access) minutes plummeted from 567 billion in 2000 to 316 billion in 2008.11 From 2008 to 2009, interconnected Voice over Internet Protocol (VoIP) subscriptions increased by 22 percent, while switched access lines decreased by 10 percent. Incumbent telephone companies that operate in rural areas increasingly face competition from other providers, including cable and wireless companies in portions of their service area, but remain the carrier of last resort (COLR) outside of towns, where there are typically too few customers to support a sustainable business. (Page 6)

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**COMMENT** – Again, creating one system that is open network access will allow not only a chance to create a system that is sustainable once paid for, but also allows competition within the network between providers on the system. Wireless systems allow a cheaper method to connect households when compared to costly wired systems that must cross difficult terrain and disrupt communities. It also can provide a business class carrier system connectivity with the benefits of being dynamic and flexible to the needs of the community. When growth happens in a rural community, under a wired system, significant infrastructure must be deployed to meet these new needs. Under a wireless system, little to no infrastructure deployment and investment must be made.

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109. The National Broadband Plan recommended that the Commission set an initial target of 4 Mbps actual download/1 Mbps actual upload for universal service.184 We seek comment on that recommendation. If we adopt a specific threshold speed requirement as a proxy for the capabilities that consumers should be able to access with broadband, what would be the impact on the universal service funding levels of choosing a different threshold for download and upload speeds than 4 Mbps/1 Mbps?

Should any speed ultimately adopted be the minimum that a funding recipient is required to provide, while recognizing that recipients can and will provide higher speeds as the marketplace and technology evolves? (Page 40)

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**COMMENT** – Targeting a stagnate speed may be detrimental to implementing advanced communications systems. The overall rational should be a moving target constantly reviewed for changes in technology.

The divide between well served areas and underserved and unserved areas may at times vast, but the mechanisms need to be in place to all close the gaps to a reasonable rate. By expecting the rural and areas in urban regions to have equal levels of speed simply for the goal of having that equality may hinder progress towards better goals. The difference in speed should not be great, but the focus for rural areas should be on access and affordability combined with developing networks that are flexible enough to allow for speed increases as necessary.

264. We also believe we have authority to limit CAF support to only one provider per unserved area. Although state commissions and the Commission may designate more than one ETC per service area pursuant to section 214(e), that designation merely makes a provider eligible to receive support; it does not guarantee support. The term "eligible" is generally defined to mean "qualified to participate or be chosen."425 Other provisions in section 254 demonstrate that Congress understood the difference between eligibility and entitlement. (Page 92)

COMMENT – The Commission should encourage, if not require, any publicly funded network projects in unserved or underserved communities (communities with less than four (4) broadband service providers) to be built with excess capacity for use by any entity or individual in the community. Communities are unserved or underserved because they lack the population density to support the level of return on investment necessary to attract private investment, hence why they are seeking subsidized deployment through the USF. Supporting the build out of multiple private or public sector dedicated broadband networks disaggregates broadband demand in communities that lack the population density to support at least two (2) robust networks is wasteful use of scarce public funds.

Scarce public funds could be more effectively used to support the build-out of one or possibly two technology neutral (fiber, copper, wireless), robust broadband networks that can carry digital traffic for all sectors of a community would be a more effective means of using public funds to leverage private investment. The system builder out should allow for multiple providers on one system.

The ownership and operation of these networks should be separate from the delivery of services with the private sector delivering services from a common network infrastructure. This separation of the network and service delivery would enable multiple private sector entities to offer broadband services across the community.

Encouraging additional capacity for community use under the scenario described above would provide the platform in unserved and underserved for attaining six goals detailed in the National Broadband Plan.  It would also follow the principles set out by the Commission at the beginning of this NPRM.

268. As discussed more fully below, to maximize the reach of available funds, support would be available to, at most, one provider in any given unserved area. We propose to use a competitive process to compare all offers to provide service across the unserved areas eligible for participation in the first phase of the CAF, which should give providers incentives to seek the least support needed and enable identification of the providers that will achieve the greatest additional coverage with the limited funding available. We also seek comment on alternative methods for distributing support. (Page 92)

COMMENT – Projects that allow the use of excess capacity by state or local governments should be given priority. Addressing the broadband capacity needs of multiple publicly funded through a common network infrastructure project would enable the collaborators to bring together a combination of federal, state, and local public funds to more effectively leverage private investment in the project.

281. Given our objective of extending broadband to unserved housing units in as efficient a manner as possible, we propose that only one entity in any given geographic area receive support in the first phase of the CAF. We seek comment on this proposal. In some instances, the current

incumbent ETC may also be the winning bidder for CAF support. In others, another entity could win CAF support for deploying broadband in the unserved area, but the current incumbent would continue to receive support for its entire study area under existing support mechanisms as modified. What would be the

- impact on the incumbent ETC if another entity receives funding to overbuild a portion of the study area? (Page 95)

**COMMENT** – Coordinating funding goes beyond just the current incumbents. Programs need to be look at on the regional basis. Redundant systems are not needed. Governmental agencies need to allow multiple uses by breaking down independent silos. As in the previous answer this can be coordinated at a county or region level.

Unfortunately, we recognize that the resale restrictions contained in section 254(h)(3) of the Telecommunications Act and FCC rules written to support that law severely limits the ability to resell broadband service from a healthcare network subsidized by FFC grants. Furthermore provisions in the act relating to the funding of dedicated networks for schools and libraries have similar provisions that limit ability to broadband services from those networks. The law and these rules have resulted in the deployment of multiple networks that provide necessary service to the targeted entities (hospitals and healthcare providers, schools and libraries, public safety networks) in some communities while these same entities in other communities have not been able package the funding to build these dedicated networks.

We believe scare public funds would be better utilized to support carrier class, network neutral projects in communities that are unserved or underserved (Communities with less than 3 or 4 broadband service providers). The network infrastructure should be owned and operated by an entity that does not deliver services. Or if the network owner also delivers services the owner should be required to operate the network infrastructure as an open access network ensuring competing private sector entities have access to the network and are able to deliver competing services. This arrangement effectively aggregates demand to these robust networks that are capable of delivering broadband services to all segments of the community.

We recommend that the Commission propose legislative changes to the Congress that will enable the Commission to allow for multiple use, non-dedicated networks in communities that are unserved or underserved.

## SUMMARY

We applaud the Commission for taking steps to update the Universal Service Fund to allow for current technology in the 21st Century. It will be essential to continue to not only work with current carriers, but to find ways to bring in more competition that allows unserved and underserved regions to build out advanced communication systems.

Any effort to reform the USF program to serve underserved and unserved populations must recognize both rural and urban areas that may not have access to the level of broadband capability that is required to compete in today's environment.  Having technology neutral systems that also provide coverage to the last-mile to availability to everyone will key more growth.

Building multiple public funded systems in the same area serving different anchor institutions or communities is inefficient and waste tax dollars. Building technology neutral systems will be needed to allow underserved areas to be reached. As systems such as emergency services,

hospitals, and schools are built, consideration of how to integrate with private systems should be given to reach the last-mile and not just anchor institutions.

On the Commission's effort to make speed a keystone of the reformed program's Public Interest Obligations, keeping current with technology may mean that writing a specific standard into the regulations may not be the best approach.  Providers need to be encouraged to ensure that the capabilities of their broadband connections increase as demand and need increases – having a hard standard written into law does not achieve this goal.  The Commission should explore having a mechanism within the program to allow for reasonably timed updates to any speed standard.

As the lead in a community-wide effort to grow broadband connectivity in a rural, economically challenged region, we support the goals of the Commission, but urge that special attention be paid to the challenges faced by rural communities.